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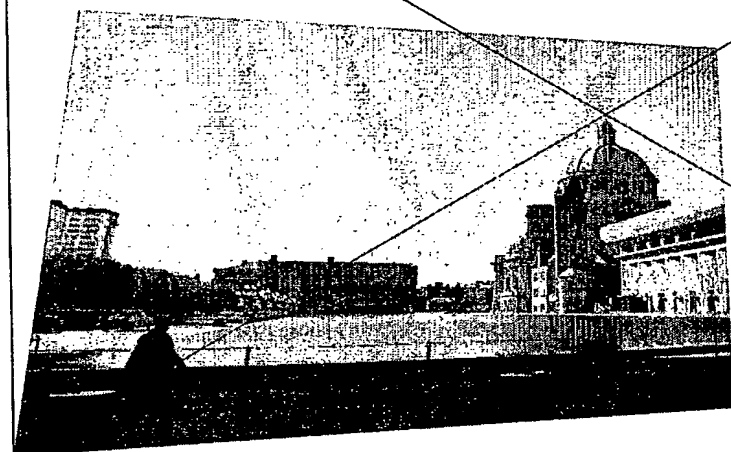
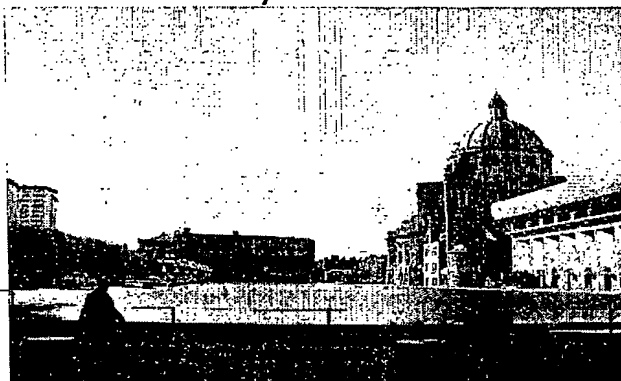


Fig. 1

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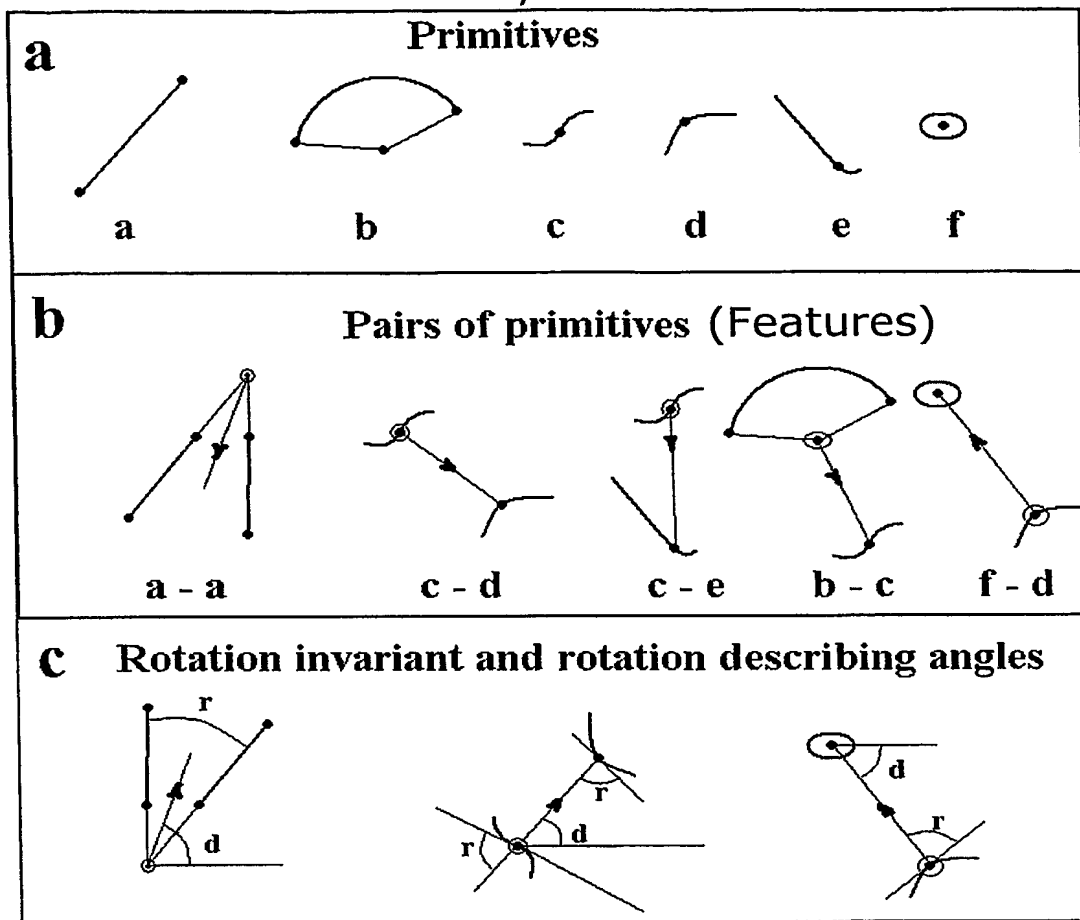


Fig. 2

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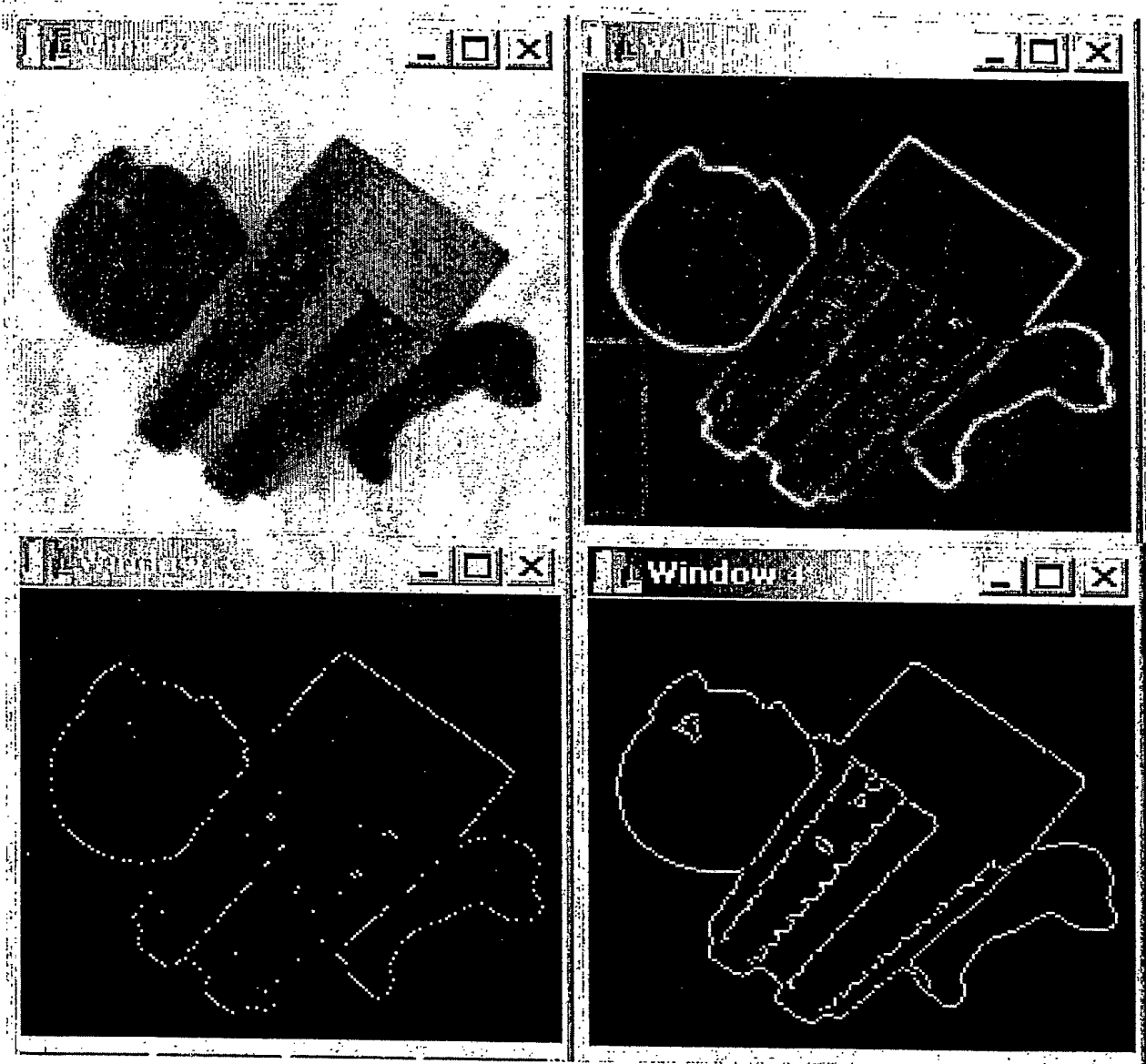


Fig. 3

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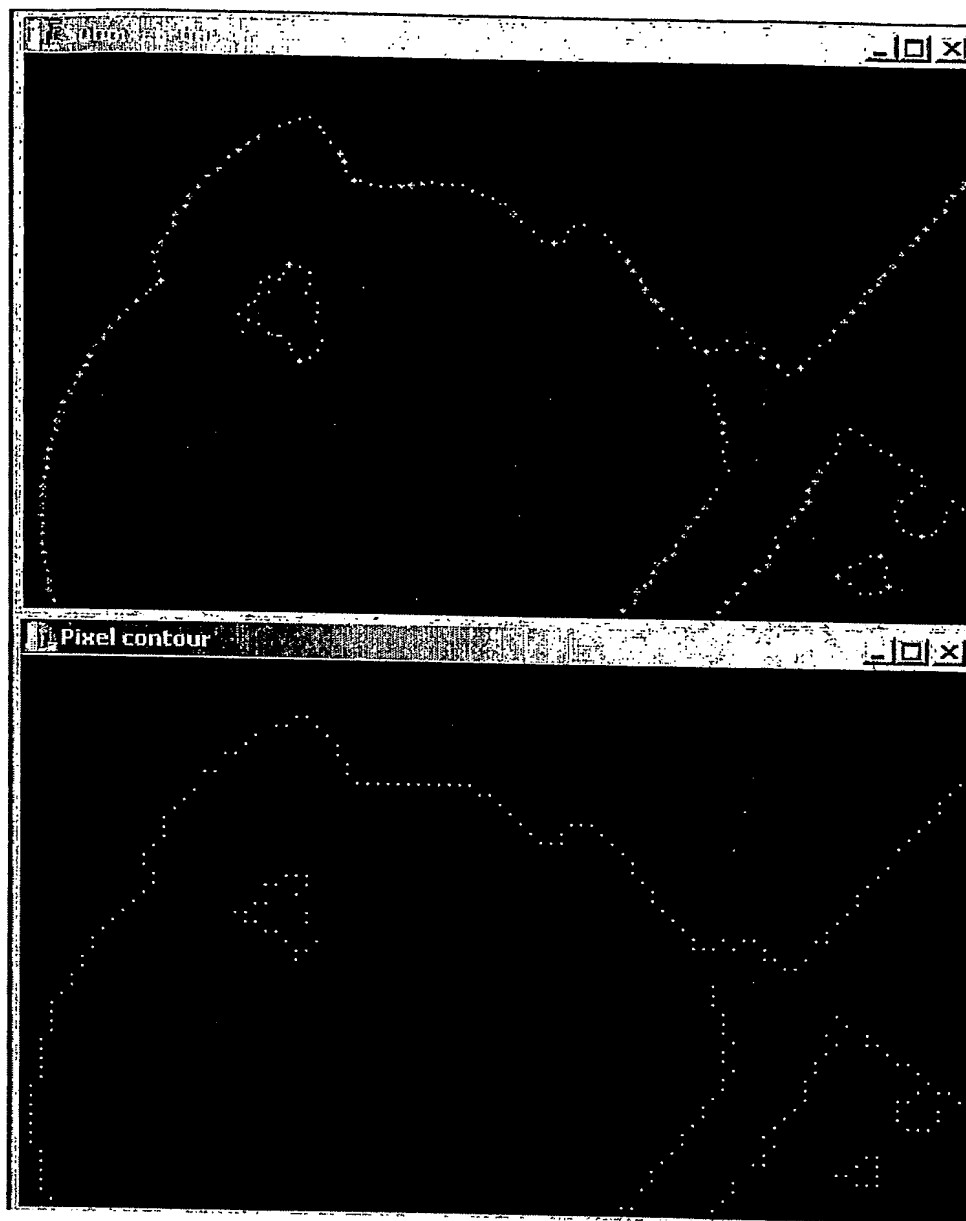


Fig. 4

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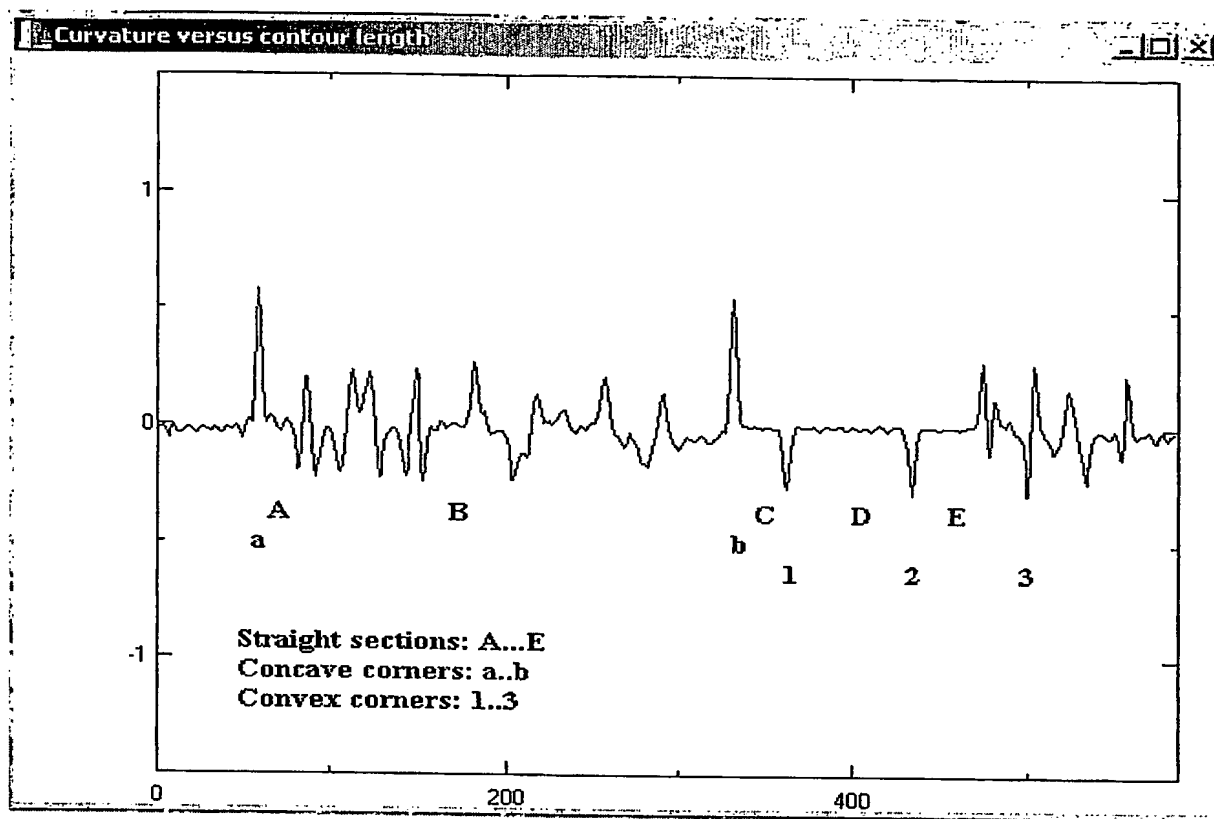


Fig. 5

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Fig. 6

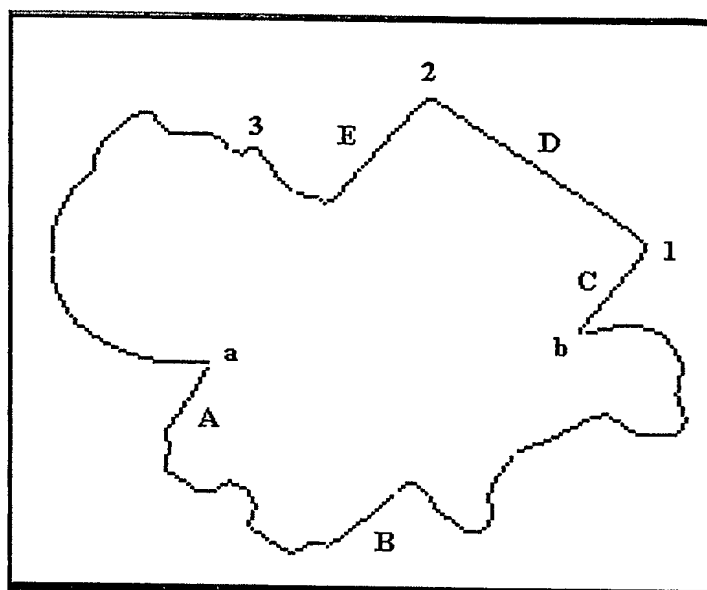
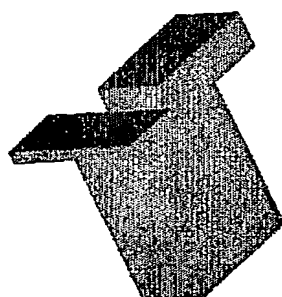


Fig. 7



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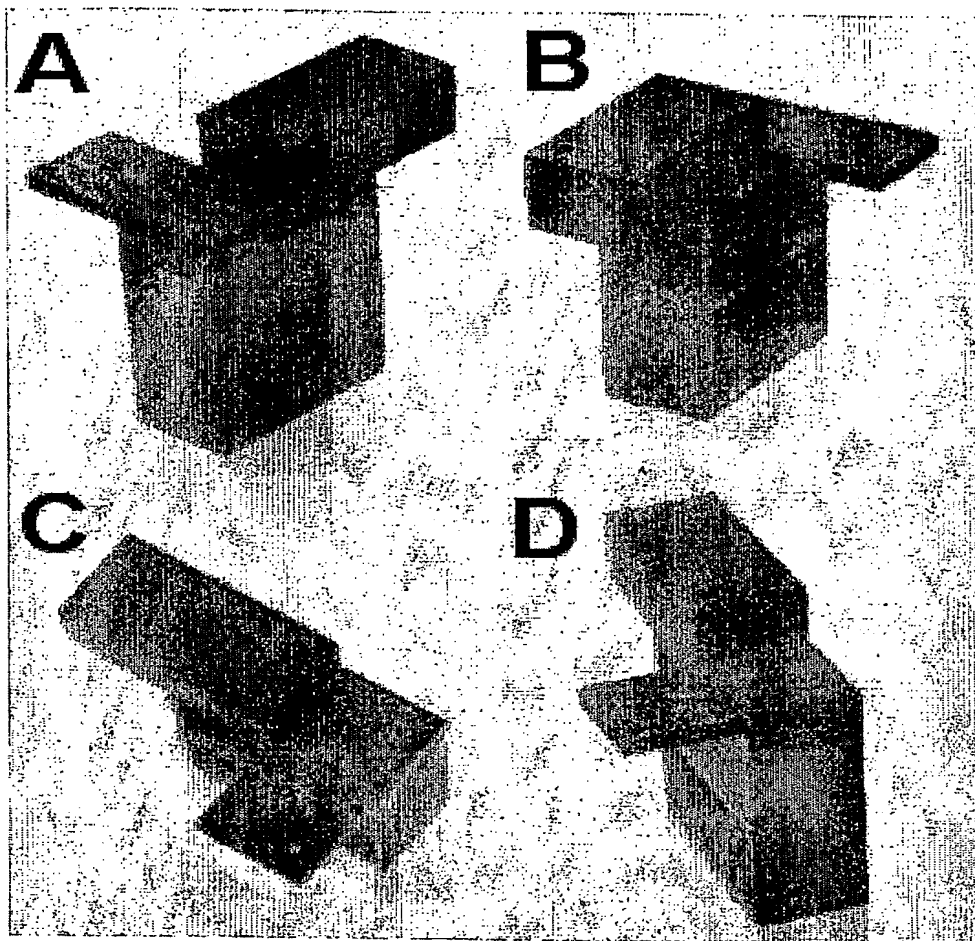


Fig. 8

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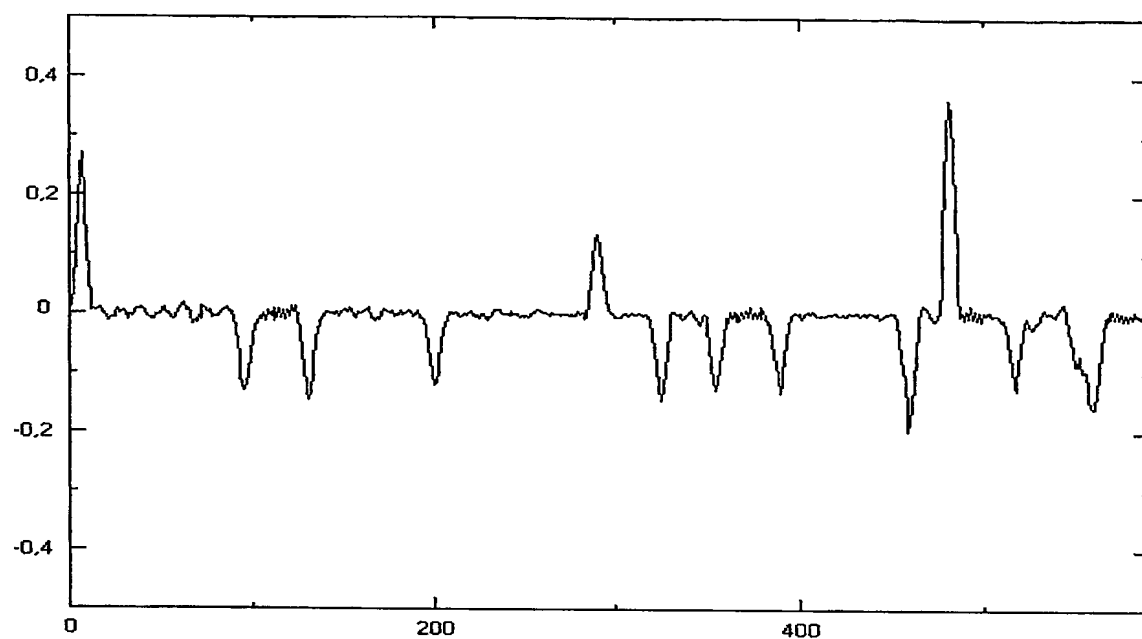


Fig. 9

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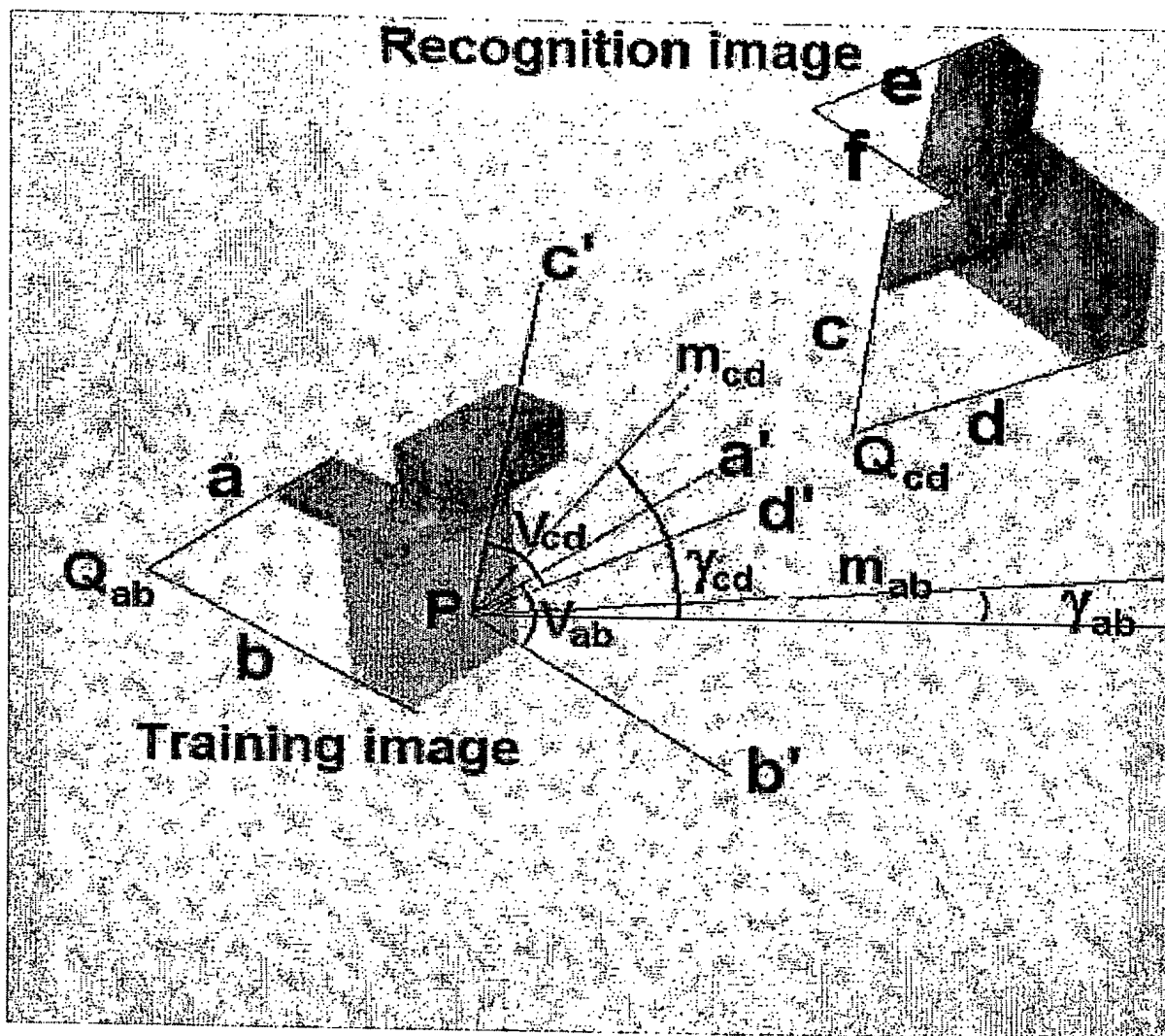


Fig. 10

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Training flow chart

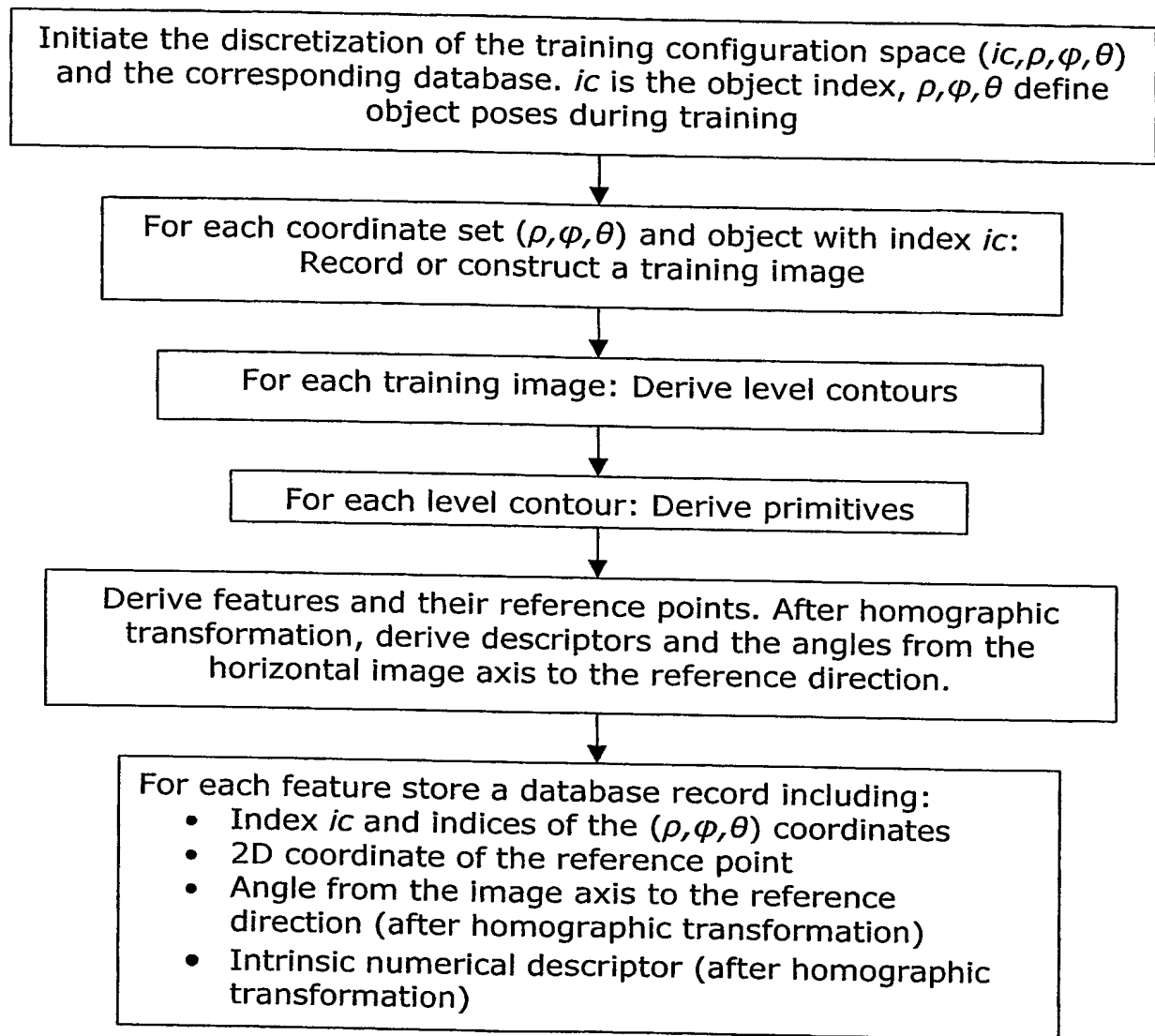
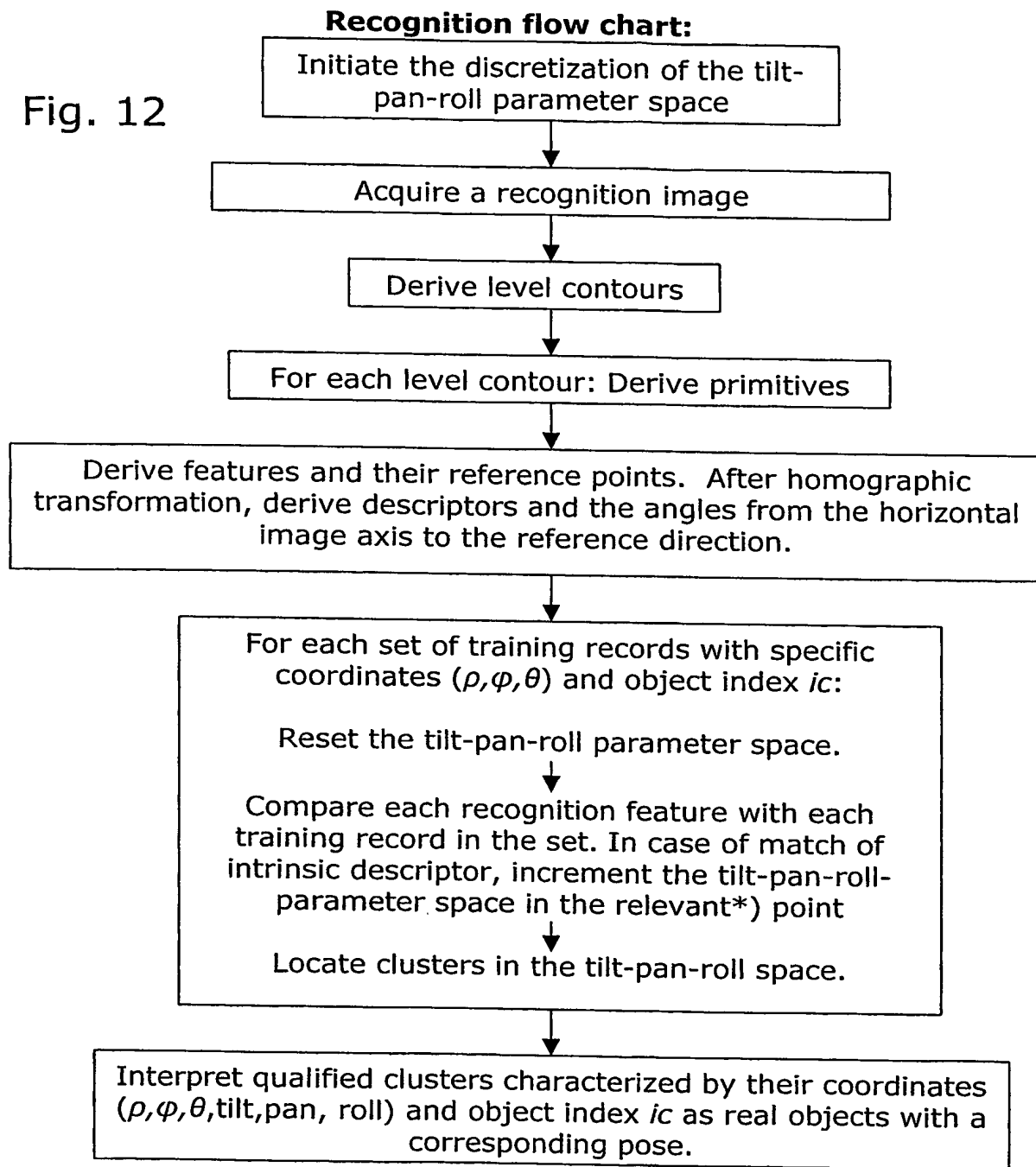


Fig. 11

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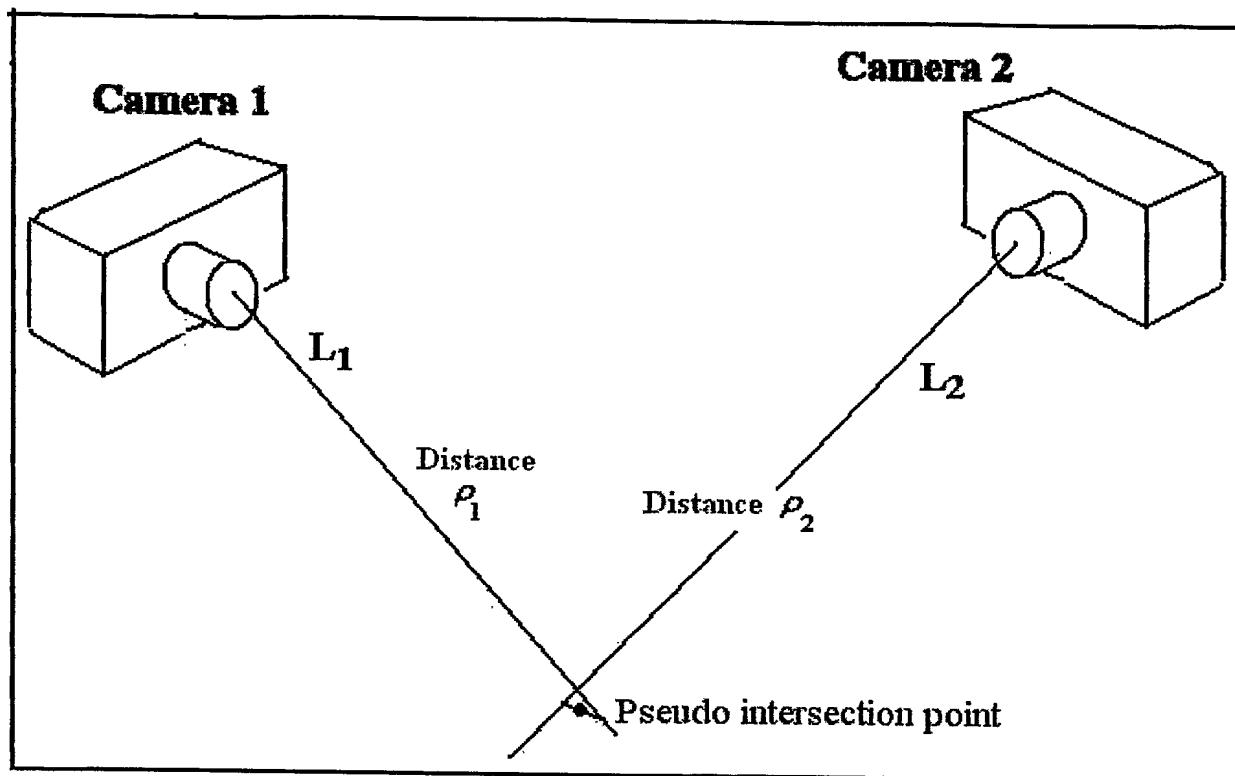
Fig. 12



*) The (tilt, pan, roll) define the angular offset between the potential recognition pose and the actual training pose. This coordinate set is derived using the reference points and reference directions of both training and recognition features, see Appendix A

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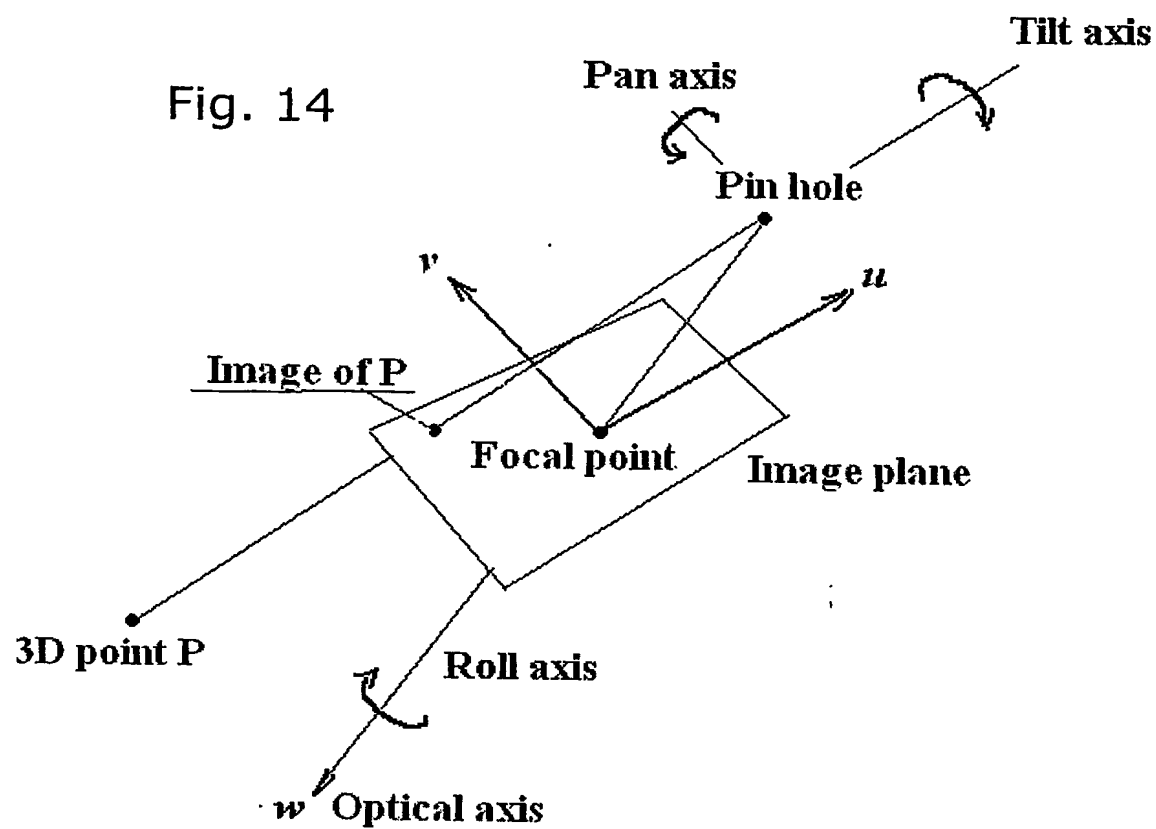
Fig. 13



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Fig. 14



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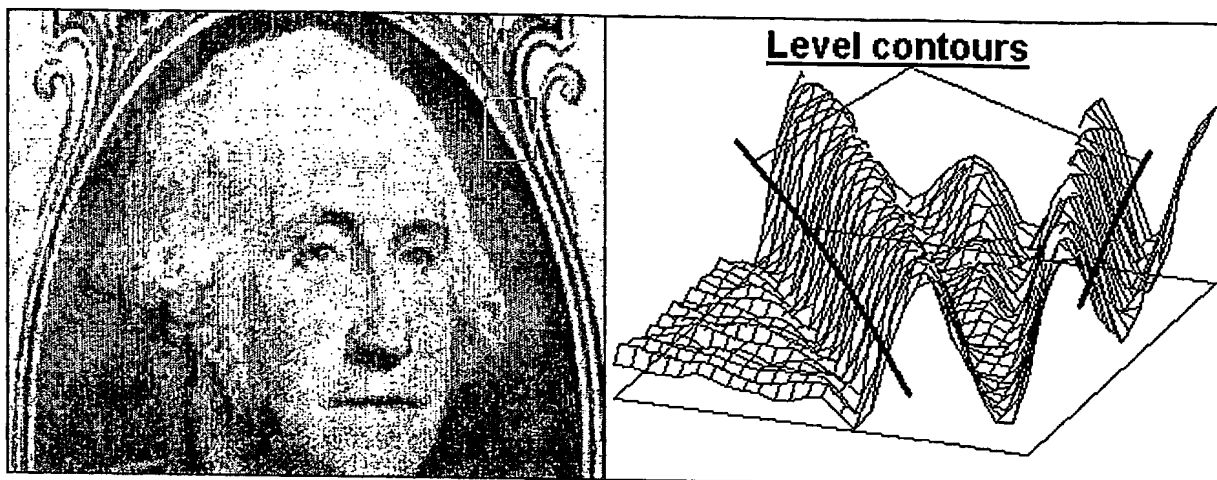


Fig. 15a

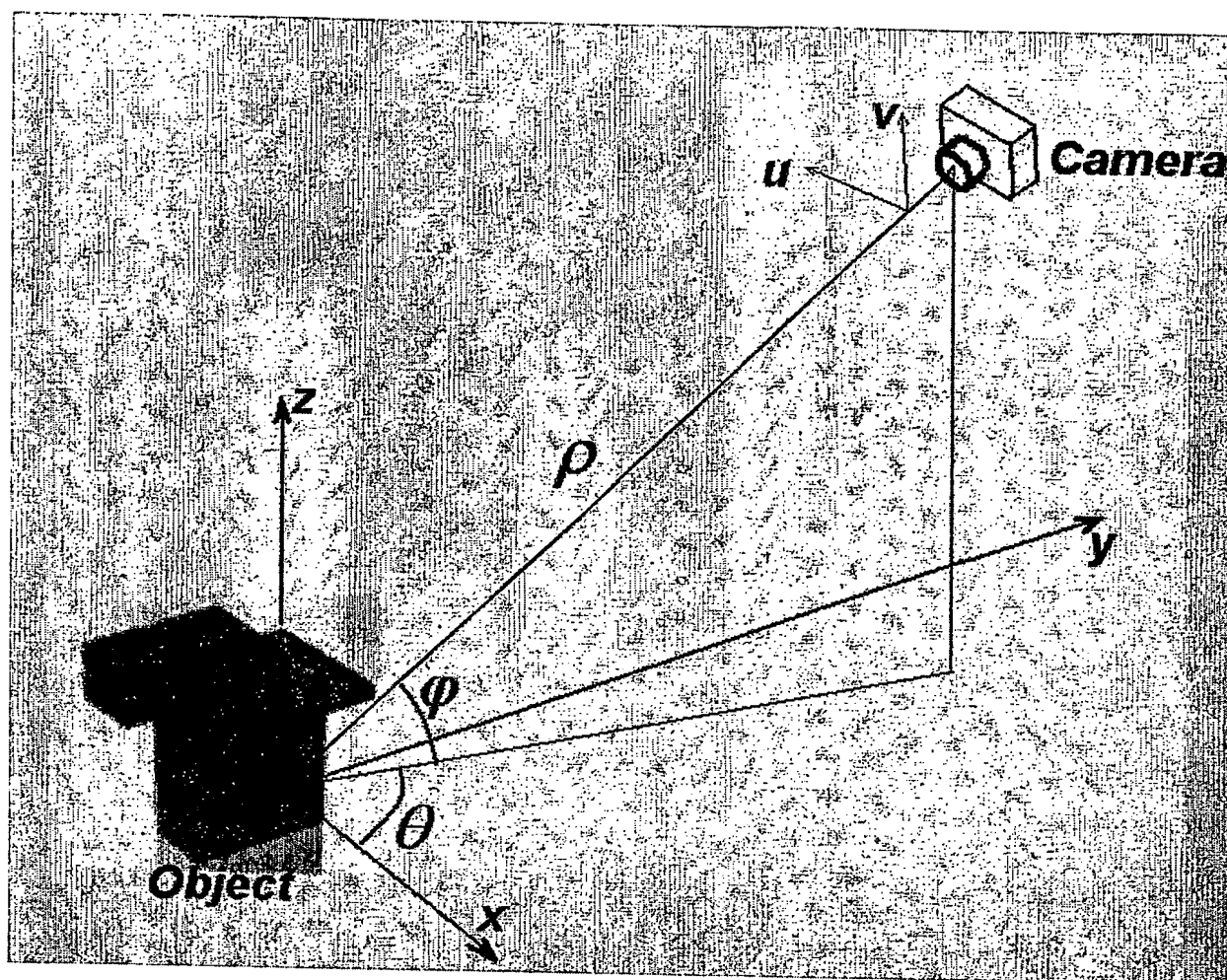
Fig. 15b

Fig. 15

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Fig. 16



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Fig. 17

Table A - Structure of the database of descriptors derived from training images

	Intrinsic descriptors Λ			Extrinsic descriptors			
	ref.point	ref.point	ref. dir	
Training image 1				u_0	v_0	γ	$\Pi_{1,1}$
							$\Pi_{1,2}$
	$\rho_i, \varphi_j, \theta_k$						
Training image 2							$\Pi_{2,1}$
							$\Pi_{2,2}$
	$\rho_i, \varphi_j, \theta_k$						
	+1						
	

Fig. 18

Table B – Structure of descriptors derived from a recognition image

Intrinsic descriptors Λ			Extrinsic descriptors			
			u_0	v_0	γ	
						π_1
						π_2